IN THE SPECIFICATION:

Page 2, replace the paragraph starting at line 22 and ending at page 3, line 2 with the following paragraph.

The thermoelectric materials with the highest Figure of merit at the present time are $IrSb_3$ having a skutterudite-type crystal structure, and BiTe, PbTe, and other such chalcogen compounds, which are known to provide highly efficient thermoelectric conversion capability, but from the standpoint of protecting the global environment, the use of these heavy metal elements is expected to be restricted in the future.

Page 4, replace the paragraph starting at line 17 and ending at line 26 with the following paragraph.

The "silicon-rich phase" is a crystal phase in which silicon accounts for at least 80 at % of the crystal grains. The "added element-rich phase" is a crystal phase in which [[a]] an added element has been deposited at the grain boundary of crystal grain composed of a silicon-rich phase, encompassing everything from depositing just enough to adhere to the crystal grains to depositing enough to surface the crystal grains in a layer, depending on the doping amount, and this crystal phase has at least one type of added element deposited at the grain boundary of these crystal grains. A case in which a trace amount of silicon is deposited at the grain boundary is also included.

Page 5, replace the paragraph starting at line 1 and ending at line 6 with the following paragraph.

Specifically, the present invention is a thermoelectric conversion material having a crystal structure in which [[a]] an added element or combination of added elements is or are contained in an amount of 0.001 to 30 at% in silicon, and at least one type of added element is deposited at the grain boundary of crystal grains in which silicon accounts for at least 80 at% of the polycrystal structure.

Page 13, replace the paragraph starting at line 20 and ending at line 26 with the following paragraph.

For instance, when a silicon-based molten material is cast and cooled in a shallow plate, [[of]] if the plate is water-cooled or brought into contact with a chiller, then cooling at a rate of at least 50K/sec is appropriate, for example, which will keep the crystal grain size to just a few hundred microns or less and result in a high Seebeck coefficient. A preferable cooling rate is 50K/sec to 500Ksec, and it is possible to achieve an average crystal grain size of 10 to 200 μm.